

Claims

- [c1] 1. A method for securing software to reduce unauthorized use of the software and for selectively exchanging information, the method comprising:
providing software including data representing digital content;
associating at least one identifier with the software prior to distribution of the software, the at least one identifier being detectable by a resident authorized representative to request authentication of the software and selective exchange of information with a remote authorized representative; and
distributing the software with the at least one identifier to a user.
- [c2] 2. The method of claim 1 wherein selective exchange of information includes instructions for the resident authorized representative to contact a remote authorized representative at predetermined intervals.
- [c3] 3. The method of claim 2 wherein the information is selected from a group consisting of updates, upgrades, patches, marketing information, promotional information, quality assurance information, network monitoring

and metering information, and error and usage information.

- [c4] 4. The method of claim 1 wherein the selective exchange of information includes a transfer of instructions for dynamic authorized representative changes.
- [c5] 5. The method of claim 1 wherein the exchange of information includes a transfer of instructions for repeating authentication.
- [c6] 6. The method of claim 1 wherein the digital content is selected from the group consisting of data representing music, data representing video, instructions executable by a computer, code for an application program, code for an operating system, code for a game, data representing a movie, data representing graphics, data representing watermarked works, data representing a magazine, and data representing a book.
- [c7] 7. The method of claim 1 wherein the identifier is hidden from the user.
- [c8] 8. The method of claim 1 wherein the identifier is tamper resistant to the user.
- [c9] 9. The method of claim 1 wherein the at least one identifier is embedded within a file of at least one component

of the software.

- [c10] 10. The method of claim 1 wherein the at least one identifier is a binary code.
- [c11] 11. The method of claim 1 wherein the at least one identifier is encrypted.
- [c12] 12. The method of claim 1 wherein the step of distributing the software comprises electronically distributing the software.
- [c13] 13. The method of claim 1 wherein the step of distributing the software comprises distributing the software on a computer readable storage medium.
- [c14] 14. The method of claim 1 further comprising:
performing a process to determine whether an attempted access to the software is authorized based on detection of the at least one identifier.
- [c15] 15. The method of claim 14 wherein the step of performing a process comprises:
determining whether the attempted access to the software is authorized based on registration information associated with the software.
- [c16] 16. The method of claim 14 wherein the step of performing a process comprises:

determining whether the attempted access to the software is authorized based on registration information associated with the software and registration information associated with a user device.

- [c17] 17. The method of claim 1 further comprising:
communicating registration information to an authorized representative of the software;
generating at least one authentication code based on the registration information; and
associating the authentication code with the software.
- [c18] 18. The method of claim 17 wherein authorized representative functions are implemented by a user device.
- [c19] 19. The method of claim 17 wherein authorized representative functions are implemented by software.
- [c20] 20. The method of claim 17 wherein authorized representative functions are implemented by hardware.
- [c21] 21. The method of claim 20 wherein authorized representative functions are implemented by hardware and software.
- [c22] 22. The method of claim 1 wherein the at least one identifier is included in a file name for at least one component of the software.

- [c23] 23. The method of claim 22 wherein the identifier is selected from the group consisting of a filename, a filename prefix, a filename suffix, a filename extension, a filename extension prefix, and a filename extension suffix.
- [c24] 24. The method of claim 22 wherein the identifier is tamper resistant to the user.
- [c25] 25. The method of claim 22 wherein the identifier is hidden to the user.
- [c26] 26. A method for securing software to reduce unauthorized use of the software and to selectively exchange information, the method comprising:
providing software including data representing digital content;
associating a plurality of identifiers with the software prior to distribution of the software, at least one identifier being detectable by a resident authorized representative to request authentication of the software and to request selective exchange of information with a remote authorized representative; and
distributing the software with the plurality of identifiers to a user.
- [c27] 27. The method of claim 26 wherein at least one of the

identifiers is an activation code that must be entered prior to transferring the software.

[c28] 28. The method of claim 26 wherein the identifier that requests selective exchange of information triggers instructions for the resident authorized administrator to contact a remote authorized representative at predetermined intervals.

[c29] 29. The method of claim 27 wherein the information is selected from a group consisting of updates, upgrades, patches, marketing information, promotional information, quality assurance information, network monitoring and metering information, and error and usage information.

[c30] 30. The method of claim 26 further comprising exchanging information including instructions for dynamic authorized representative changes after detecting a request for selective exchange of information.

[c31] 31. The method of claim 26 further comprising exchanging information including instructions for repeating authentication.

[c32] 32. The method of claim 26 wherein the digital content is selected from the group consisting of data representing music, data representing video, instructions exe-

cutable by a computer, code for an application program, code for an operating system, code for a game, data representing a movie, data representing graphics, data representing watermarked works, data representing a magazine, and data representing a book.

- [c33] 33. The method of claim 26 wherein the at least one identifier is hidden from the user.
- [c34] 34. The method of claim 26 wherein the at least one identifier is tamper resistant to the user.
- [c35] 35. The method of claim 26 wherein the at least one identifier is embedded within a file of at least one component of the software.
- [c36] 36. The method of claim 26 wherein the at least one identifier is a binary code.
- [c37] 37. The method of claim 26 wherein the at least one identifier is encrypted.
- [c38] 38. The method of claim 26 wherein the step of distributing the software comprises electronically distributing the software.
- [c39] 39. The method of claim 26 wherein the step of distributing the software comprises distributing the software on a computer readable storage medium.

- [c40] 40. The method of claim 26 further comprising:
performing a process to determine whether an attempted access to the software is authorized based on detection of the at least one identifier.
- [c41] 41. The method of claim 40 wherein the step of performing a process comprises:
determining whether the attempted access to the software is authorized based on registration information associated with the software.
- [c42] 42. The method of claim 40 wherein the step of performing a process comprises:
determining whether the attempted access to the software is authorized based on registration information associated with the software and registration information associated with a user device.
- [c43] 43. The method of claim 26 further comprising:
communicating registration information to an authorized representative of the software;
generating at least one authentication code based on the registration information; and
associating the authentication code with the software.
- [c44] 44. The method of claim 43 wherein authorized representative functions are implemented by a user device.

- [c45] 45. The method of claim 43 wherein authorized representative functions are implemented by software.
- [c46] 46. The method of claim 43 wherein authorized representative functions are implemented by hardware.
- [c47] 47. The method of claim 43 wherein authorized representative functions are implemented by hardware and software.
- [c48] 48. The method of claim 26 wherein the at least one identifier is included in a file name for at least one component of the software.
- [c49] 49. The method of claim 48 wherein the identifier is selected from the group consisting of a filename, a filename prefix, a filename suffix, a filename extension, a filename extension prefix, and a filename extension suffix.
- [c50] 50. The method of claim 48 wherein the identifier is tamper resistant to the user.
- [c51] 51. The method of claim 48 wherein the identifier is hidden to the user.
- [c52] 52. The method of claim 26 further comprising:
detecting at least one identifier corresponding to a re-

quest to selectively exchange information; and selectively exchanging information with a remote authorized representative.

[c53] 53. The method of claim 52 wherein the step of selectively exchanging comprises transferring information to the resident authorized representative.

[c54] 54. The method of claim 52 wherein the step of selectively exchanging comprises exchanging registration information.

[c55] 55. A method for digital rights management including selectively exchanging information between at least one resident authorized representative entity installed on or in a user device and at least one remote authorized representative entity, the method comprising:
associating at least one identifier with the software to designate the software for protection from unauthorized use;
associating at least one identifier with the software to request selective communication with a remote authorized representative;
detecting the identifiers using an authorized representative resident on or in the user device;
determining whether the user device is authorized to access the software using the authorized representative

entity installed on or in the user device;
controlling access to the software based on whether the user device is determined to be authorized; and
selectively exchanging information with the remote authorized representative.

[c56] 56. The method of claim 55 wherein the software includes instructions for the resident authorized administrator to contact the remote authorized representative at predetermined intervals.

[c57] 57. The method of claim 56 wherein the selectively exchanged information is selected from a group consisting of updates, upgrades, patches, marketing information, promotional information, quality assurance information, network monitoring and metering information, and error and usage information.

[c58] 58. The method of claim 55 wherein selectively exchanging information includes exchanging instructions for dynamic authorized representative changes.

[c59] 59. The method of claim 55 wherein selectively exchanging information includes repeating authentication.

[c60] 60. The method of claim 55 further comprising:
determining whether the user device is authorized to access the software using the remotely located authorized

representative entity in combination with the authorized representative entity installed on or in the user device.

[c61] 61. The method of claim 55 wherein the authorized representative entity installed on or in the user device comprises a computer chip.

[c62] 62. The method of claim 55 wherein the authorized representative entity installed on or in the user device comprises program instructions executed by a microprocessor.

[c63] 63. The method of claim 62 wherein the program instructions comprise an operating system component.

[c64] 64. The method of claim 62 wherein the program instructions comprise an application program.

[c65] 65. The method of claim 62 wherein the program instructions comprise a driver for a secondary device.

[c66] 66. The method of claim 55 wherein the step of determining whether the user device is authorized comprises: comparing registration information associated with the user device to registration information associated with the software.

[c67] 67. The method of claim 66 wherein the registration information associated with the software is embedded

within an authentication code.

- [c68] 68. The method of claim 66 wherein the registration information associated with the software is encrypted.
- [c69] 69. The method of claim 66 wherein the registration information includes hardware information.
- [c70] 70. The method of claim 69 wherein the registration information includes hardware information associated with a unique user device.
- [c71] 71. The method of claim 69 wherein the hardware information includes a serial number.
- [c72] 72. The method of claim 69 wherein the registration information includes hardware information associated with a group of user devices.
- [c73] 73. The method of claim 55 wherein the resident authorized representative entity is installed by a manufacturer of the user device.
- [c74] 74. The method of claim 55 wherein the resident authorized representative entity is installed from a computer readable storage medium.
- [c75] 75. The method of claim 55 wherein the resident authorized representative entity is installed from the software.

- [c76] 76. The method of claim 55 wherein the resident authorized representative entity is downloaded to the user device.
- [c77] 77. The method of claim 55 wherein the authorized representative entity is transferred to the user device from a network.
- [c78] 78. The method of claim 55 wherein the step of controlling access comprises preventing the software from being transferred to a second user device.
- [c79] 79. The method of claim 55 wherein the step of controlling access comprises preventing the software from being transferred to a user device if at least one authorized representative is not functional.
- [c80] 80. The method of claim 55 wherein the step of controlling access comprises preventing the software from being installed on a user device if at least one authorized representative is not present.
- [c81] 81. The method of claim 55 wherein the step of controlling access comprises preventing the software from being executed by the user device.
- [c82] 82. The method of claim 55 wherein the step of controlling access comprises providing limited access to the

software.

- [c83] 83. The method of claim 55 wherein the software comprises digital content.
- [c84] 84. The method of claim 83 wherein the software is selected from the group consisting of data representing music, data representing video, instructions executable by a computer, code for an application program, code for an operating system, code for a game, data representing a movie, data representing graphics, data representing watermarked works, data representing a magazine, and data representing a book.
- [c85] 85. The method of claim 55 wherein the software comprises instructions for generating at least one authentication code based on registration information associated with the user device.
- [c86] 86. The method of claim 55 wherein the software comprises instructions for encrypting the authentication code.
- [c87] 87. A method for securing software to reduce unauthorized use of the software, the method comprising:
providing software including data representing digital content;
detecting an identifier associated with the software indi-

cating that protection from unauthorized use is desired;
detecting an identifier associated with the software indicating that selective exchange of information is requested;

communicating with an authorized representative entity to determine whether a user device attempting to access the software is authorized to access the software; and
controlling access to the software based on whether the user device is authorized.

[c88] 88. The method of claim 87 wherein the identifier associated with the software is contained within a filename for the software.

[c89] 89. The method of claim 87 wherein the authorized representative entity is a hardware device.

[c90] 90. The method of claim 87 wherein the step of communicating with the authorized representative entity comprises communicating with at least one software module associated with the user device.

[c91] 91. The method of claim 87 wherein the authorized representative entity is installed on the user device.

[c92] 92. The method of claim 87 further comprising:
generating an authentication code based on registration information associated with the user device; and

associating the authentication code with the software.

[c93] 93. The method of claim 87 wherein the step of communicating comprises:

generating an authentication code based on registration information associated with the user device; and

comparing the authentication code with a previously generated authentication code associated with the software to determine if the user device is authorized.

[c94] 94. The method of claim 93 wherein the step of comparing the authentication code comprises determining if at least a portion of system information associated with the user device matches system information encoded within the authentication code associated with the software.

[c95] 95. The method of claim 93 wherein the registration information includes hardware-specific information.

[c96] 96. The method of claim 87 wherein the authorized representative entity is installed on or in the user device.

[c97] 97. The method of claim 87 wherein the digital content is selected from the group consisting of data representing music, data representing video, instructions executable by a computer, code for an application program, code for an operating system, code for a game, data representing a movie, data representing graphics, data

representing watermarked works, data representing a magazine, and data representing a book.